

Title (en)

THIN FILM TRANSISTOR AND MANUFACTURING METHOD THEREFOR

Title (de)

DÜNNSCHICHTTRANSISTOR UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)

TRANSISTOR EN COUCHES MINCES ET SON PROCÉDÉ DE FABRICATION

Publication

EP 3413335 A4 20190911 (EN)

Application

EP 16843279 A 20160511

Priority

- CN 201610076318 A 20160203
- CN 2016081696 W 20160511

Abstract (en)

[origin: US2018090601A1] A thin-film transistor (TFT) and a manufacturing method thereof. The manufacturing method for the TFT includes: depositing metal film layers on a substrate by a direct current (DC) sputtering method; and forming a metal oxide film layer or metal oxide film layers by completely oxidizing or partially oxidizing the metal film layers. The TFT includes a gate electrode layer and a gate insulating layer which are tightly integrated.

IPC 8 full level

H01L 29/786 (2006.01); **H01L 29/423** (2006.01); **H01L 29/49** (2006.01); **H01L 29/66** (2006.01)

CPC (source: CN EP US)

C23C 14/165 (2013.01 - EP US); **C23C 14/185** (2013.01 - US); **C23C 14/205** (2013.01 - EP US); **C23C 14/34** (2013.01 - CN);
C23C 14/35 (2013.01 - CN); **C23C 14/5853** (2013.01 - EP US); **C25D 11/022** (2013.01 - CN EP US); **C25D 11/04** (2013.01 - EP US);
C25D 11/26 (2013.01 - EP US); **C25D 11/34** (2013.01 - EP US); **H01L 21/0223** (2013.01 - US); **H01L 21/02422** (2013.01 - US);
H01L 21/02565 (2013.01 - US); **H01L 21/02614** (2013.01 - US); **H01L 21/443** (2013.01 - US); **H01L 29/24** (2013.01 - US);
H01L 29/42384 (2013.01 - EP US); **H01L 29/4908** (2013.01 - EP US); **H01L 29/517** (2013.01 - US); **H01L 29/66742** (2013.01 - CN);
H01L 29/66969 (2013.01 - EP US); **H01L 29/786** (2013.01 - CN US); **H01L 29/78603** (2013.01 - EP US); **H01L 29/78606** (2013.01 - EP US);
H01L 29/7869 (2013.01 - CN EP US); **H01L 29/78693** (2013.01 - US); **H01L 21/02244** (2013.01 - EP US); **H01L 21/02258** (2013.01 - EP US)

Citation (search report)

- [XI] CN 105161423 A 20151216 - UNIV SOUTH CHINA TECH
- See references of WO 2017133114A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

US 10439070 B2 20191008; US 2018090601 A1 20180329; CN 105529275 A 20160427; EP 3413335 A1 20181212; EP 3413335 A4 20190911;
EP 3413335 B1 20221026; WO 2017133114 A1 20170810

DOCDB simple family (application)

US 201615515004 A 20160511; CN 2016081696 W 20160511; CN 201610076318 A 20160203; EP 16843279 A 20160511